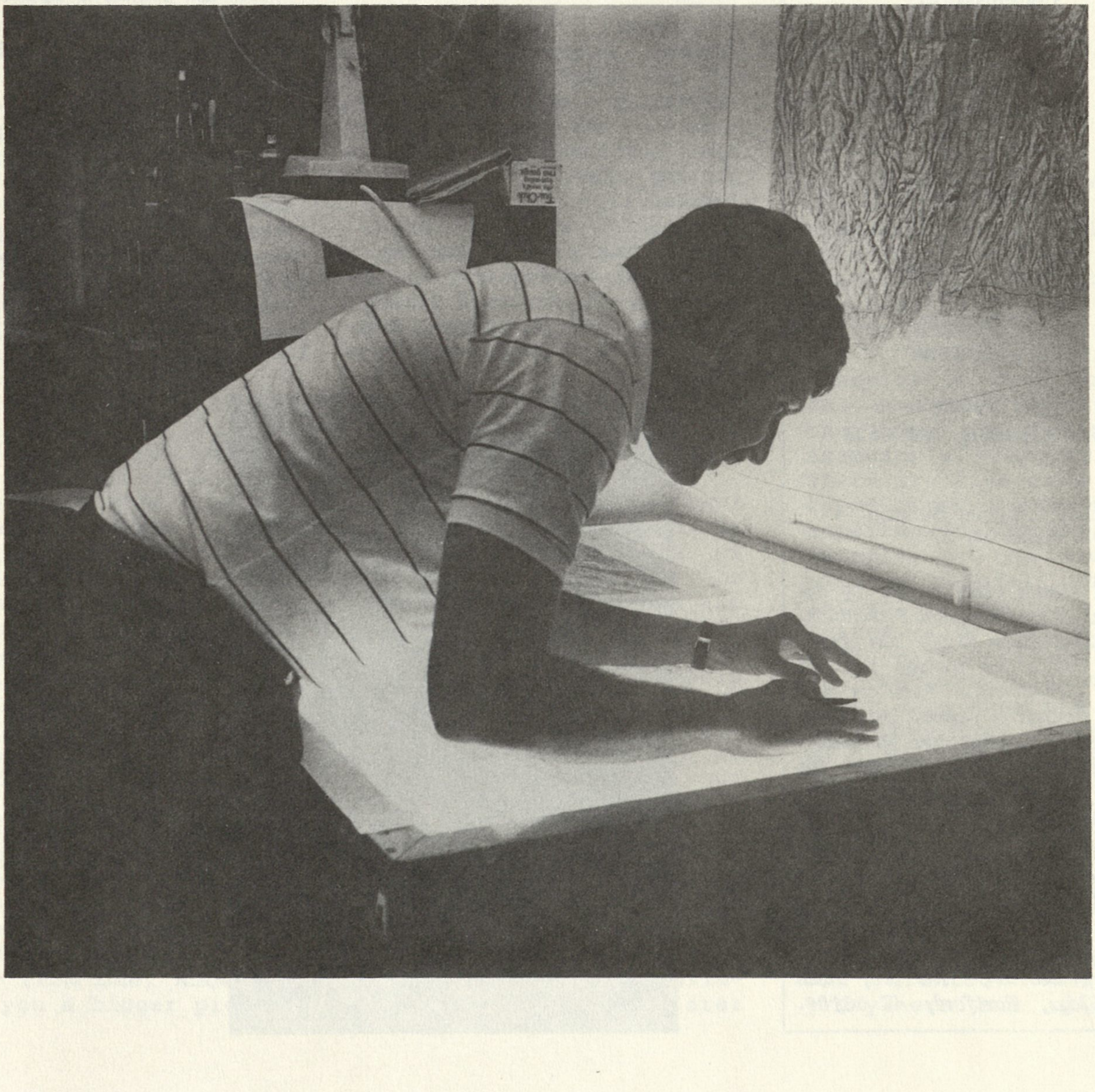
CT DOCS
En90
cb
V.11, No. 2
Item 12B

Citizens' Bulletin

Volume 11 Number 2 October 1983 $5/yr.
The Connecticut Department of Environmental Protection

CONN COLLEGE LIB
DEC 7 '83
NEW LONDON, C

Maybe we should draw you a map!



Citizens' Bulletin
October 1983
Volume 11 Number 2 $5/yr.
Cover Photo: William Warzecha, Senior Environmental Analyst, DEP

Contents

2 Coordinator named
3 Maps put you in your place
12 Connecticut's on the map!
16 Black ducks and bird dogs
17 FYI: Waste plan
18 "Stinktier" is stinkier
20 Views of Bluff Point
21 Exhibit, exercise, energy
22 Events, et cetera
24 Trailside Botanizing

Commissioner
Stanley J. Pac

Director Info & Ed
William Delaney

Editor
Margot Callahan

Graphics
Rosemary Gutbrod

Composition
Caryn Alleva

Circulation
Helen Moriarty 566-5524

DEP Citizens' Bulletin
(USPS 041-570)

Published eleven times a year by the Department of Environmental Protection. Yearly subscription $5.00; two years, $9.00. 2nd class postage paid at Hartford, Connecticut. Funds are also provided through a federal grant from the Office of Coastal Zone Management under the Coastal Zone Management Act of 1972. Please forward any address change immediately.

Material may be reprinted without permission provided credit is given, unless otherwise noted. Address communications to Ed., DEP Citizens' Bulletin, Dept. of Environmental Protection, Rm. 112, State Office Bldg., Hartford, CT 06106.

Indian affairs coordinator named

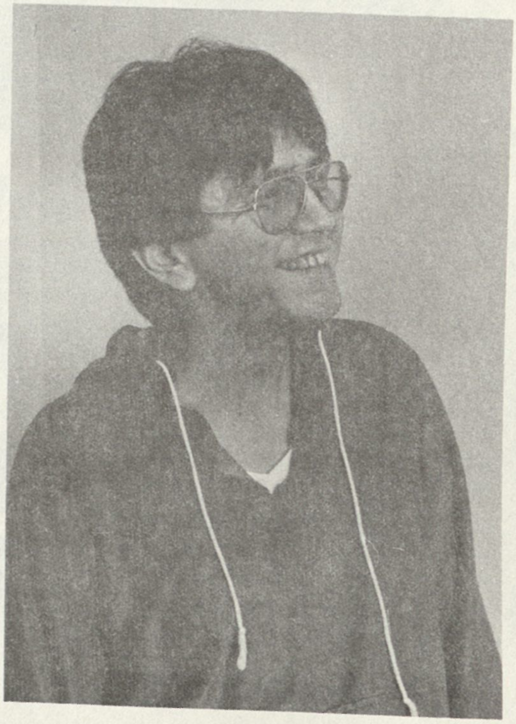
Edward Sarabia of Meriden has joined the Department of Environmental Protection as Indian Affairs Coordinator. In the part-time position, Sarabia is responsible for providing liaison between the DEP and Connecticut's Indian community and for working closely with the Connecticut Indian Affairs Council, which formally represents the State's five recognized Indian tribes.

Sarabia, a native of Klukwan, Alaska, and a member of the Tlingit Indian tribe, previously worked as CETA director and job development team coordinator for American Indians for Development in Meriden.

He has also worked as a vocational rehabilitation counselor for the State of Alaska's Department of Education, Division of Vocational Rehabilitation, in Juneau, and as a native counselor for Fluor-Alaska, Inc., of Fairbanks.

Sarabia attended Tacoma, Washington, Community College and received his Bachelor of Arts degree in rehabilitation from Seattle University.

"As DEP's Indian Affairs Coordinator," Sarabia says, "I plan to work with the Connecticut Indian Affairs Council to develop a more unified voice among not only the Connecticut Indians but among all Indians." ■



Ooops!

Correction: seedling offer

Price of "Forest Planting Stock" is $56.00 per 1,000 tree seedlings (conifer species).

DEP's Harwinton Headquarter's phone number is 485-0226. ■

"The Connecticut Department of Environmental Protection is an equal opportunity agency that provides services, facilities and employment opportunities without regard to race, color, religion, age, sex, physical handicap, national origin, ancestry, marital status or political beliefs."

Where in the world...?

Maps can tell you precisely that, and plenty more

By Richard Hyde, Principal Environmental Analyst,

DEP Natural Resource Center

Figures: Rosemary Gutbrod

MAPS: Have you ever been on a trip or out hiking or fishing and gotten "turned around"? The heart starts pounding, the perspiration begins to flow. "Where am I? Which way should I go? Let's see, that way is north, I think." You travel a while, and the doubts begin to mount. "I've been in this area before, I know it like the back of my hand." For some reason you have passed by or mis-identified a landmark; and the map in your head is mixed up, and you can't find yourself in it. "Why did I leave my map at home?"

MAPS: how often we use them in our daily lives and don't even think about it. They're so easy you don't even have to know very much about them; your mind almost inherently knows what to do, knows how to get helpful information from one, knows it gives you a bigger picture and helps to place you in your surroundings. Just identify a few points and immediately you are in the middle of the map in your head; you know where you are and generally how far and what you have to go through to get to where you want to go. Isn't it amazing how maps are part of us?

What is a map? Generally speaking it is an idealized picture of the earth's surface or some part of it. Maps are drawings which emphasize or exclude some features, and which may use symbols or imaginary lines that do not really exist on the ground -- such things as political boundaries, town names, zones, coordinate grids, etc. Maps that cover offshore areas of the coasts or cover aspects of navigation are always called CHARTS.

Two common map varieties used regularly are: a) PLANIMETRIC MAPS -- these show spacial relationships, horizontal locations in two dimensions only. They usually are used to display things on or characteristics of the earth's surface; examples of this would be the everyday road map or the town zoning and tax assessor's property maps. There are also less common types that cover certain aspects of geology, for example, or the distribution of rainfall or population, among other things. b) TOPOGRAPHIC MAPS -- in addition to the two horizontal dimensions these maps show the vertical dimension, or relief, of the earth's surface through some graphic method such as contour lines.

Brief history

Today we take maps for granted; they are everywhere and take many different forms. They cover just about every subject, from relatively permanent things such as highway layouts and the physical features of the land surface to the hourly changes in the weather or the temperature distribution in the human body. Maps are made as hard copies or on video screen displays that disappear with the push of a button.

The history of map making in America, as in the rest of the world, predates written history. Crude maps were probably first used to guide hunters to areas of plentiful game or depicted the least difficult trails for tribes to use in their treks to summer encampments. The coming of white settlers familiar with the need for and use of maps brought a substantial increase in their use, first as a record of exploration and later to delineate the partition of the new world into individual land holdings and political divisions.

In 1807 the government of the United States produced the first official maps when President Thomas Jefferson signed a bill formally recognizing a new responsibility: "the development and dissemination of maps and charts to promote the safety and welfare of the people." In the beginning, the primary effort centered on mapping to provide safety for mariners, ships, and cargoes. The nation's lifeblood was waterborne commerce along the Atlantic Coast, and shipwrecks were common because of incomplete information on reefs, wrecks, and other navigational hazards.

By the time of the Civil War the tremendous demand for charts and maps strained the capability of the Coast Survey, the agency responsible. The annual map production had jumped from less than 10,000 to 66,000 by 1863. Following the Civil War the country embarked on a period of great expansion and urgent needs arose for detailed information about the resources and interior lands to the west. Responding to the need, Congress authorized many surveys including four major federal territorial surveys. In 1879 the U.S. Geological Survey was formed, and Congress has made annual appropriations specifically for topographic surveys ever since.

Map components . . . directions, boundaries, scale, symbols

Directions

To gain the most from a map it is important to first take a quick survey of what you have. Ask yourself a few questions: How is the map oriented? Which way is north, south, east, and west? Is there a north arrow? Once you find the north arrow, orient the map so north is at the top of the paper. In this position east is always to your right, south is at the bottom of the paper, and west is to your left. For more detail, see the section on coordinate system.

Boundaries

The next question should be: What are the boundaries of the map? What area on the earth's surface does the map represent? Usually the legend will have a small inset map showing where the map is in relation to some larger area such as a town or state boundary. Finally all maps are made at a specific scale, depending on the size of the area being mapped, the detail of mapping, and what the map is to be used for. Scale is another way of saying what distances on the ground are represented by the map. This also should be found in the map legend.

Scales

Maps usually represent a large area. It would be impractical to have your map at the same scale, in a one-to-one relationship, as the mapped area, because the map would probably prove too bulky and be very difficult to handle, although the detail of information could be great. So convention requires some amount of reduction, with the amount of reduction being the scale of the map. By contrast, it is also possible to map the very small, such as a single living cell, but this is done as an enlargement and the amount of the enlargement is also the scale. A definition for map scale is "the relationship between the measured distance on the map and the actual distance of that measurement on the ground."

Scale may be expressed in several different ways and usually is on many maps. One way is the FRACTIONAL SCALE, or ratio, which is the numerical expression of the distance on the map as it corresponds to the distance on the ground. In an example where the map

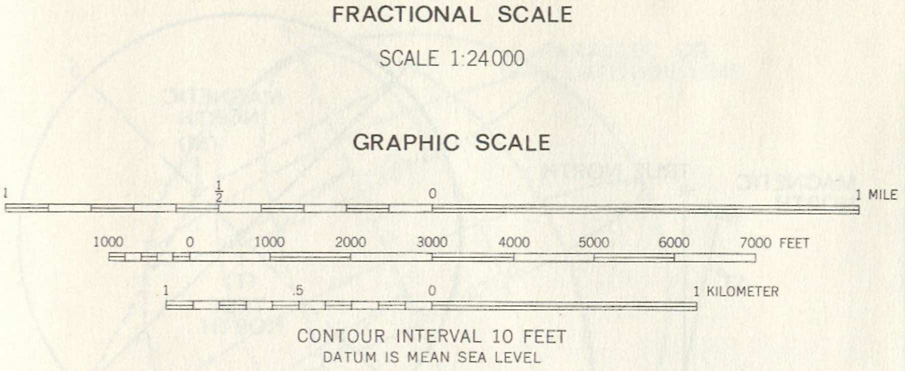


Figure 1

Using the fractional scale 1:24,000, one unit on the map is equivalent to 24,000 of the same units on the ground. The graphic scale, below, offers units of measurement which may be used to measure ground distances directly from the map. The advantage of the latter is that even if map is reduced or enlarged, map to ground relationship stays the same and distances can be determined directly from the map.

scale is 1/24,000 or 1:24,000, the fraction indicates one unit on the map is equivalent to 24,000 of the same units on the ground. In this example one inch on the map equals 24,000 inches on the ground or one centimeter on the map equals 24,000 centimeters on the ground. One advantage to this system is that there really isn't any unit of measure you have to use, you use whatever measure you want as long as you use the same units on the map and on the ground.

Another scale is the VERBAL SCALE, which is a statement in words of what unit on the map is equivalent to some distance on the ground. For example, on our 1/24,000 scale map you might see "one-inch represents two thousand feet," which is correct if you take a one inch unit on the map: it is equal to 24,000 inches on the ground or 24,000"/12 or 2,000 feet. Verbal scales are especially useful for road maps or other popular maps aimed at people who don't use maps that often. There is one problem with both fractional and verbal maps which occurs when the map is enlarged or reduced. In either case, the true scale of the map changes with its enlargement or reduction, but the scale as printed on the map may not be changed to agree with the enlargement or reduction and therefore an incorrect scale remains to befuddle the user.

A third type of scale is the GRAPHIC SCALE or bar scale. It is a line or bar divided into several units of measurement (feet, meters, miles, kilometers) which may be used to measure ground distances directly from the map, with the aid of a ruler. The advantage to graphic scales is that even if the map is enlarged or reduced the map to ground relationship stays the same, and the scale can still be used to determine ground distances directly from the map (see Figure 1).

Symbols used on maps

Maps use symbols to give the reader information about the map and the land that would be difficult to express in any other way. Generally, symbols are enlarged or exaggerated in scale to highlight important information and for ease of reading. Many are recognizable for what they represent, such as a church, a railroad, or a river.

Colors

In order to provide uniformity in a map series such as the U.S.G.S. topographic maps, specific colors are used to represent the various categories of cultural and natural features depicted. As an example, the U.S. topographic series uses black to show buildings, boundaries, and several other man made features; blue for water; and green for vegetative cover, forests, and orchards. Red is used to depict major highways; yellow or pink to show urban and other built up areas; and brown to express relief, usually in the form of contour lines.

Coordinate systems

To know what direction is what on a map you must use some reference line to orient yourself. The reference system we use is the polar axis of the earth; we say this is our north-south direction. Because the earth is a sphere, there are an infinite number of north-south lines which slice the earth through the polar axis.

So directions may be thought of as angles between lines and the north-south line. On published maps, unless indicated otherwise, by convention the top of the map is always north and therefore south is toward the bottom. If in doubt, maps should have a north arrow pointing in the direction of true north.

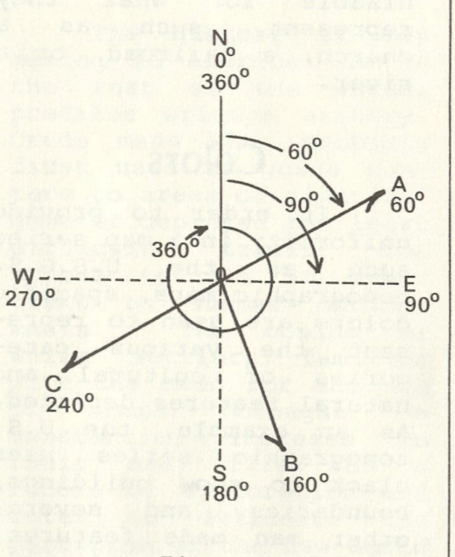


Figure 2

Diagram shows azimuths to four principal points of the compass and to points A, B, and C. The curved arrows show how azimuth is measured. The 0 at the center indicates the observer or the imaginary position at which the directions are measured. The single line between C and A (like all lines) has two different azimuths, depending upon whether you look from 0 to A or from 0 to C. The back azimuth of 0A is 60° plus 180°, or 240°, the azimuth of 0C or AC.

An easy way to express the directional angle is to use the AZIMUTH system, just like that on a compass. Angles are stated in degrees of a circle. There are 360 degrees in a circle, with north always being zero degrees. Moving clockwise, any line (direction) may be defined by some angle between zero and 360 degrees (see Figure 2). Therefore due east would be 90 degrees E, due south 180 degrees S, and due west 270 degrees W.

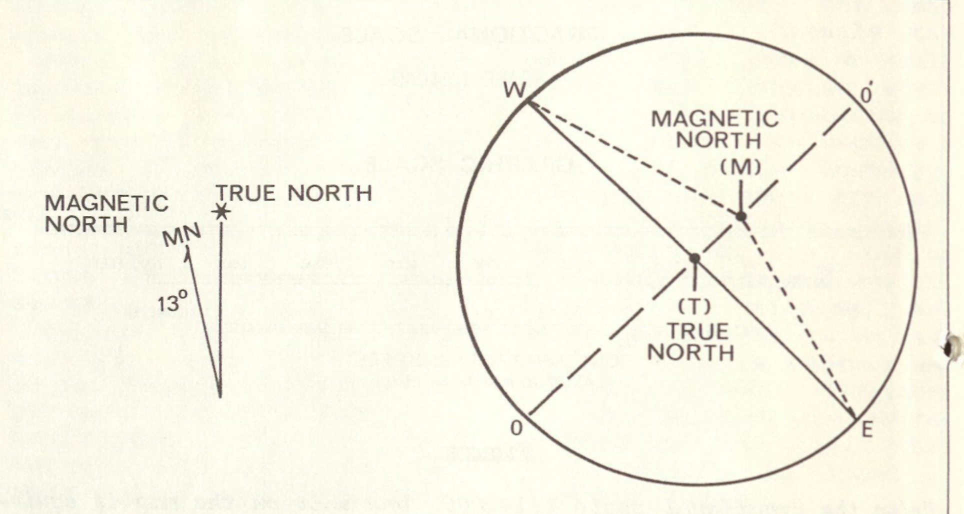


Figure 3

Arrow-and-half-arrow shows relationship between magnetic north and true north as shown on Connecticut maps. In other figure, the earth is seen schematically from a point above the north rotational pole (T). Angular difference between lines from points on the earth to the two poles varies with position around the earth from zero to a maximum. Lines OT and OM have the same direction; lines O'T and O'M have the same direction. From points O and O' there is no magnetic declination. From E the magnetic declination (angle TEM) is a maximum and M lies to the right of T; from W the magnetic declination (angle TWM) is a maximum and M lies to the left of T. In the upper part of the diagram all declinations are to the west and in the lower part to the east.

Just to confuse things a bit, there are two principal kinds of north: true and magnetic north. Generally all published maps use true north, which uses the rotational axis of the earth as its reference. The north end of the axis is true north, and the south end is south. On the other hand, directional measurements taken with a compass yield magnetic north, which is not in the same position as true north. In fact, depending on where you are on the earth's surface, the angular difference between true north and magnetic north will vary anywhere from zero to 90 degrees east or west of true north. This is called the MAGNETIC DECLINATION.

One other problem with magnetic north is that it moves, over time, often by as much as one degree in 20 years, so for precise map work magnetic declination tables should be consulted. The topographic quadrangle maps for Connecticut indicate the magnetic declination in the legend by the use of arrows (see Figure 3).

The mechanism by which points and areas on the earth's surface can be located is the geographic coordinate system. The maps we most often see use a geographic grid system formed by lines called the LATITUDE and LONGITUDE lines. These two sets of lines cross to divide the curved earth's surface into grids. Each line has

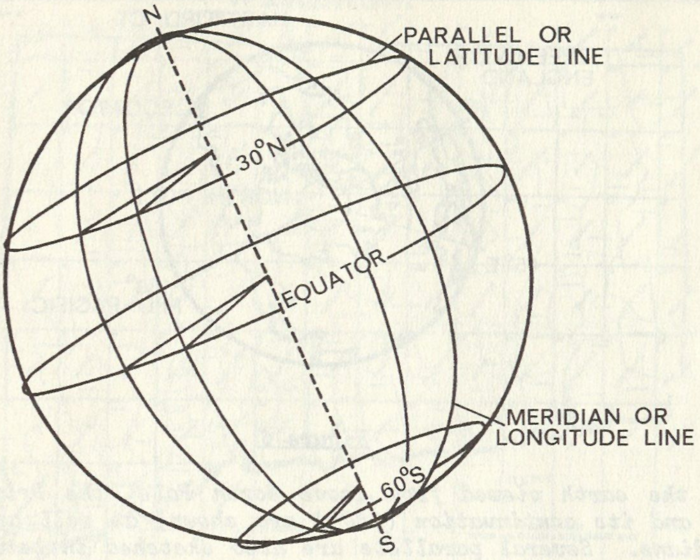


Figure 4

Perspective view of a transparent earth shows polar axis (N-S), Equator, two parallels of latitude, and two meridians.

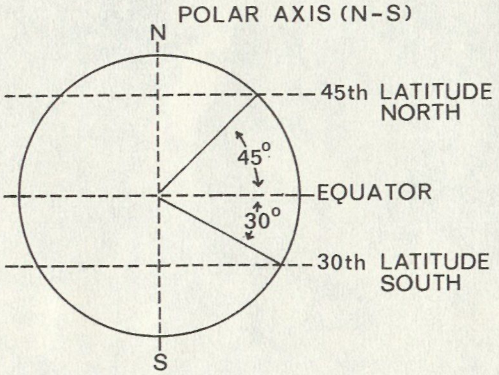


Figure 5

Cross section of the earth from north to south shows parallels of latitude formed by imaginary planes parallel to the Equator and at given angular distances from it.

a number name which is based on its position from some reference Nearly all maps made today use this location system (see Figure 4).

LATITUDES are parallel lines which use the equator, or zero latitude, as their reference. The equator is that imaginary circular plane that cuts through the earth, at a 90 degree angle to the earth's north-south rotational axis, bisecting it into two equal parts. Using the zero latitude as the plane of origin, the halves of the globe are successively bisected by any number of imaginary planes which are north and south of and parallel to the equator. Each of these parallels, or latitudes, is given the name of the angle formed by the plane of the equator and a line drawn to the point on the earth's surface of the parallel north or south. So a parallel north of the equator that forms an angle of 90 degrees is called the 90th parallel, or the 90th north latitude line. This parallel is the highest angle name used because it occurs only where the equator and the rotational axis are perpendicular to each other, and it is also true north. A parallel that falls on the land surface between the 90 degree parallel and the equator would be called by its angle, such as the 45 degree north parallel or latitude. The same system of naming parallels applies to the southern hemisphere (see Figure 5).

LONGITUDE is the second reference that is needed to pinpoint locations, the east-west component in the process. Using planes that cut through and are parallel to the north-south rotational axis, an infinite number of circles, or meridians, can be formed, just as are parallels. By international consent, the arbitrary circle passing through Greenwich, England, was chosen as the beginning point and designated the prime meridian. The value of the origin of the angles of longitude is zero, and the same meridian continues to the opposite side of the globe where its value is 180 degrees. The location of any meridian may then be defined as the angular distance east or west of the prime meridian (see Figure 6).

Using this system of latitude and longitude it is possible to find any point on the earth's surface by knowing its angular distance from the equator and its angular distance from the prime meridian. As an example, the State Capitol of Connecticut is Hartford; it is located at 41 degrees north of the equator, its latitude, and 72 degrees west of Greenwich, England, its longitude. But that covers a large area, and the system allows for much more precision. If you want to know the location of the State Capitol building in Hartford it can be located by using minutes and seconds of arc: the Capitol is at 41 degrees 45 minutes 50 seconds N latitude, and 72 degrees 40 minutes 57 seconds W longitude. It takes 60 seconds of arc to make one minute and 60 minutes of arc to make one degree.

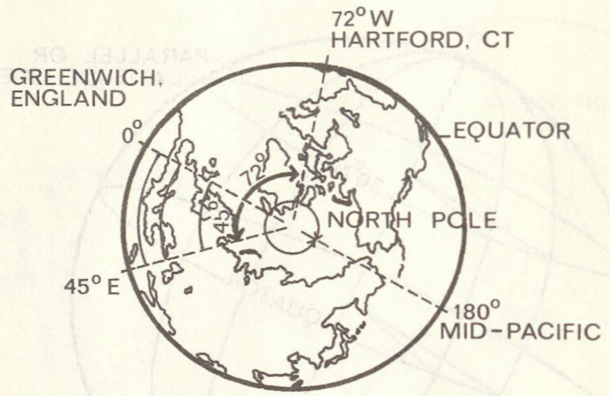


__Figure 6__

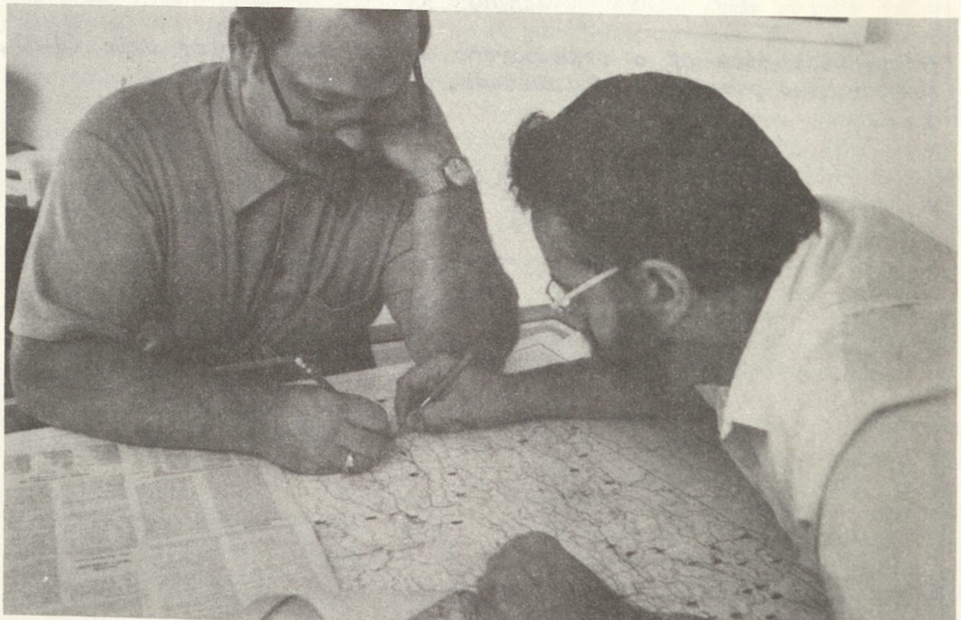
With the earth viewed from above North Pole, the Prime Meridian (0°) and its continuation (180°) are shown, as well as two other meridians. Several parallels are also sketched in between 0° and 45° E.

Connecticut maps

Planimetric base

Connecticut has some of the most detailed and complete map coverage in all the country. Of course the State is fairly small and relatively easy to handle as far as mapping projects go. Connecticut essentially forms a three million acre rectangle. The types of mapping done on a statewide basis range from photo maps of the land surface, where the photo distortion has been removed by a special plotter hooked up to a computer, to maps that cover geology, topography, wetlands, hydrology, biology, and many other features.

Modern maps are generally made by taking the information you want mapped (topography, geology, population, etc.) and plotting it onto a distortion free, horizontally corrected base, a planimetric base. You've probably noticed that photographs do not make very accurate maps because when you take a picture the curved camera lens is projecting the curved earth's surface onto a flat piece of paper. All of these curves cause a lot of distortion of the subject you are taking the picture of, especially as you get away from the center of the photograph.



James Bogar and Robert Gauthier, cartographers for DEP's Natural Resource Center, prepare a map of trout fishing areas. No other state in the country has as detailed natural resource mapping as Connecticut, with mapped information ranging from natural areas and natural resources management areas to sites of known pollution.

In Connecticut, as in much of the U.S., the foundation for our mapping system is the quadrangle area. This is an area approximately six miles wide by nine miles long, or about 55 square miles. Boundaries for the quadrangles are based on the latitude and longitude geographic grid system. Each quadrangle is bound by 7.5 minutes of latitude by 7.5 minutes of longitude. Figure 7 shows the relationship between town boundaries and the quadrangles. Actually, some towns are fortunate that they fall completely within a single quadrangle, but most fall into two or three; the Town of Stafford needs six quadrangles for complete coverage, the largest number among Connecticut towns.

Who actually does the mapping? For Connecticut the National Mapping Division of the U.S. Geological Survey produces topographic maps using a planimetric quadrangle base. These maps are produced through a cooperative program between the State and the U.S.G.S. This is a national program that insures that all similar maps in other states meet the same mapping standards and use the same mapping conventions.

Topographic maps

Maps that use contour lines to express the elevation of the land surface on a flat piece of paper are called topographic maps. Contours are imaginary lines formed by an infinite number of points of equal elevation. Starting at mean sea level as zero, the relation of each contour on the map to the actual topography of the land surface may be visualized as a series of lines, each representing some specific value of land elevation separated by a constant elevation

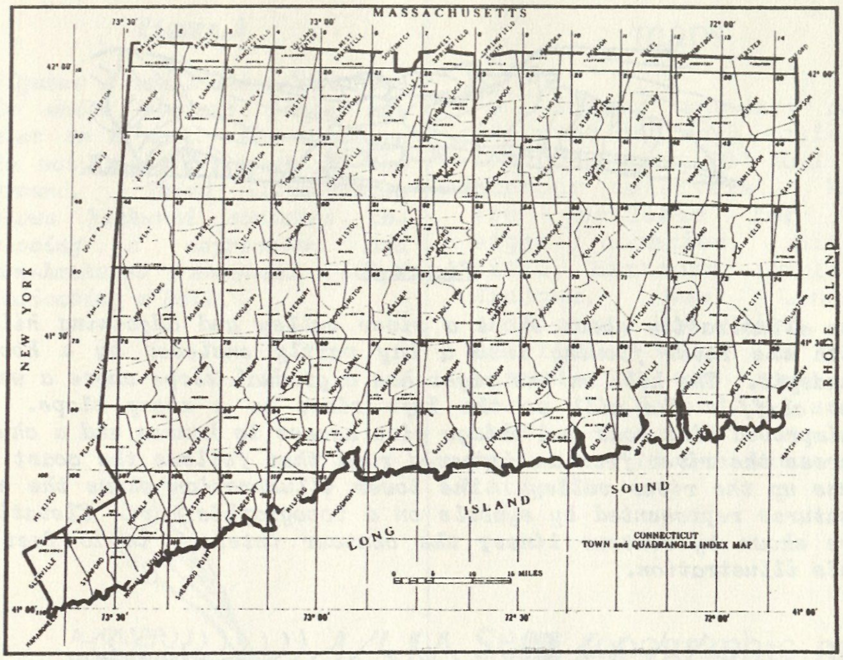
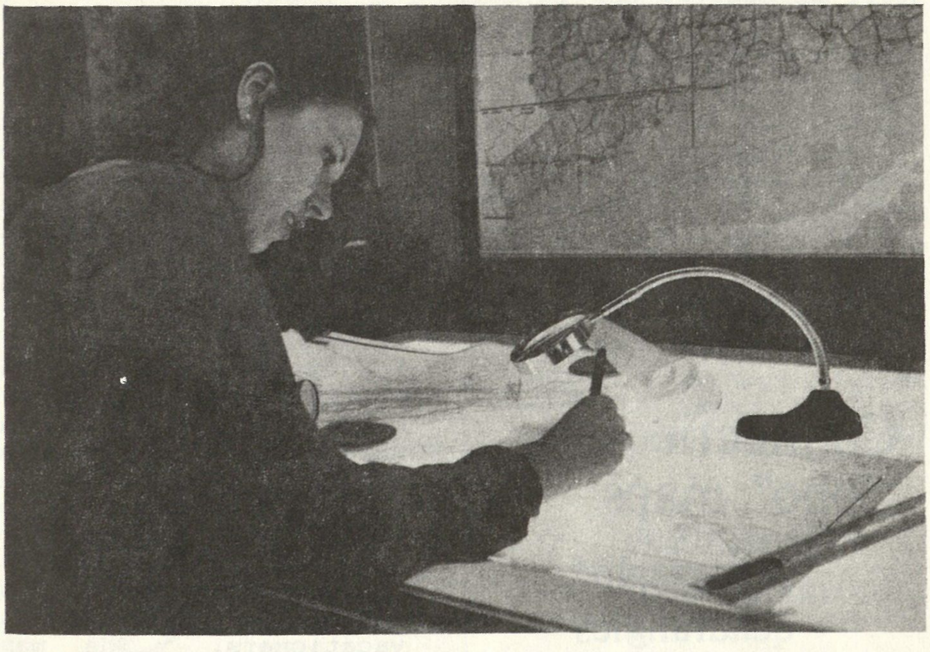


Figure 7

Each Connecticut topographic quadrangle is identified by an official U.S. Geological Survey geographic name. While some fortunate towns fall into a single quadrangle, some require several. Stafford requires six for complete coverage.



Carol Smith of DEP's Water Compliance Unit is one of over 60 persons from DEP's Natural Resource Center, Water Compliance Unit, and other units who have spent over 20 man-years since late 1979 developing detailed drainage basin maps for the State -- "getting our natural resource information out of the files and into a form that can be used."

difference. The easiest way to visualize the process is to imagine the sea is rising or falling in successive jumps. If we use the contour interval of 10 feet, as the 1/24,000 scale topographic quadrangle map does, each 10 foot successive vertical jump produces a new shoreline which is plotted on the base map. In this way each line has an elevation value, and the line on either side of it has a value of 10 feet more or less. Other common contour intervals are 20 (see Figure 8), 40, and 50 feet, each used depending on the scale and in some cases the flatness or steepness of an area.

Contour lines are plotted precisely through the use of photogrammetric techniques and ground surveys. Contours have properties that always hold true: a) they separate points of higher elevation from points of lower elevation; b) the contour line elevation is always a multiple of the contour interval; c) all contours connect with themselves, if not on the same map then on some other map; d) contour lines cannot cross or intersect but they may merge at vertical or overhanging cliffs or bridges; e) contours run perpendicular to maximum slope; f) contour lines in sloping valleys form V- or U-shaped curves with the point of the V or U pointing upstream -- the opposite is true for ridges or the nose of a hill; g) in flat areas contour lines are few and widely spaced and, conversely, in steep areas there are many and they are close together; h) by convention, every fifth contour line is thicker and has gaps in which the value of the contour is printed; i) contour lines that form a closed loop surround an area that is higher or lower than its surroundings. Hachured contours (which are composed of short parallel lines) point to and encircle depressions and non-hachured enclosed loops indicate hills (Figure 9).

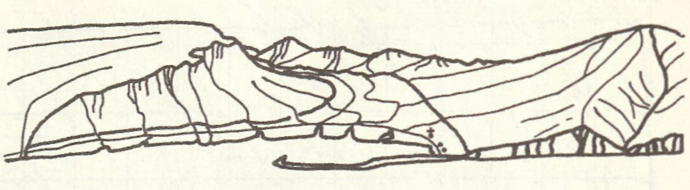
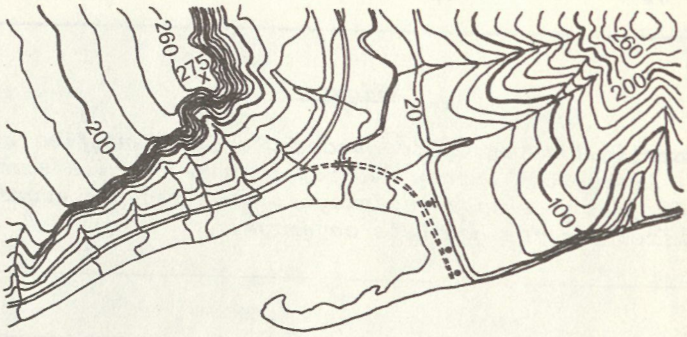


Figure 8

The illustration above shows a river valley and adjoining hills, with the river flowing into a bay partly enclosed by a hooked sandspit. The hill on the right has a gradual slope above a wave-cut cliff. The hill on the left rises to a steep slope. An unimproved dirt road and bridge give access to houses and a church across the river from an improved road that follows the coast and runs up the river valley. The lower illustration shows the same features represented by symbols on a topographic map. Elevations are shown by contour lines; the contour interval is 20 feet in this illustration.



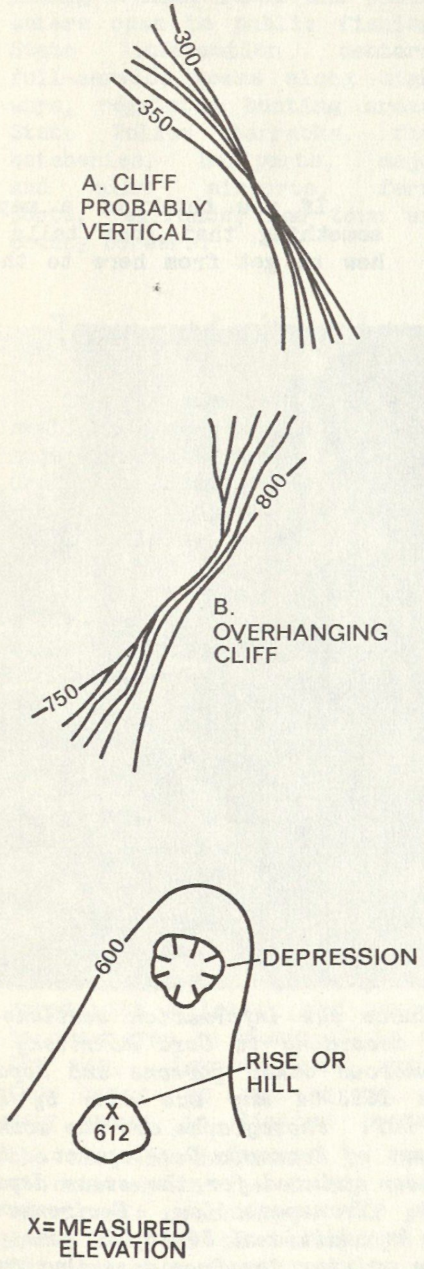
Connecticut "topo" maps

Topographic quadrangles

There are approximately 116 quadrangle areas in Connecticut with 1/24,000 scale (1" equals 2,000') topographic coverage (see Figure 7). Each quadrangle is identified by an official U.S.G.S geographic name that usually is the name of the town or borough closest to the center of the quadrangle. Topographic maps, in addition to providing information on the land surface elevation, are used extensively by planners, land managers, and natural resource scientists, as well as by increasing numbers of persons engaging in outdoor activities -- hikers, fishermen, hunters, and vacationers. The maps provide information on the shape of the land surface, its elevations, road networks, political boundaries, forest cover, and development.

Figure 9

Figures A and B show instances in which contour lines may meet on a map. The contours do not, however, meet on the ground. Third illustration shows hachured contours enclosing a depression and non-hachured enclosed loops indicating a hill.



County topographic maps

County boundary maps are produced at a scale of 1/50,000 with 20' and 40' contour intervals. Maps are available for all eight counties, Litchfield, Hartford, Tolland, Windham, New London, Middlesex, New Haven, and Fairfield, which is published as two maps, a north half and a south half, divided at 41 degrees 20 minutes N latitude.

State topographic map

The State map is produced at a scale of 1/125,000 (one inch equals approximately two miles) with 50' contour intervals. It was published by the U.S.G.S. in cooperation with the State in 1965 and revised in 1974. This map, which measures 44 by 55 inches, includes all interstate, federal, and state highways, roads, railroads, parks and forests, streams, lakes, ponds and reservoirs, plus the names of over 800 localities, as well as urban areas. The State map is available in four editions: planimetric, topographic with or topographic without green overprint showing woodland areas, and the shaded relief.

Additional information

Mylars and other base materials for the 1:24,000, 1:50,000, and 1:125,000 scale maps are available from the U.S.G.S., National Cartographic Information Center (NCIC) East, 536 National Center, Reston, VA 22092. The DEF's Natural Resource Center also has many of the mylar base materials on file in Room 553, State Office Bldg., 165 Capitol Ave., Hartford, CT 06106.■

Connecticut is on the map . . . and what a map!

By John Waters

If you want to show your city-slicker cousins from The Big Apple some real Connecticut covered bridges, how can you find out where they are?

. . .

If your kids want to go camping in a real forest, how can you quickly find out which of Connecticut's 30 State Forests permit camping?

. . .

If you want to take your scout troop to a fish hatchery or a nature preserve, how can you find the nearest one?

. . .

If you need to know which State parks are recommended for winter sports, how can you find out without calling or writing Hartford?

. . .

If Junior's teacher assigns an essay on prehistoric creatures, where can you take him in Connecticut to see genuine dinosaur footprints and reconstructed skeletons?

. . .

On the map

The answers to these questions and hundreds of others are in the new 1983-84 edition of the State's free "Transportation & Recreation Map."

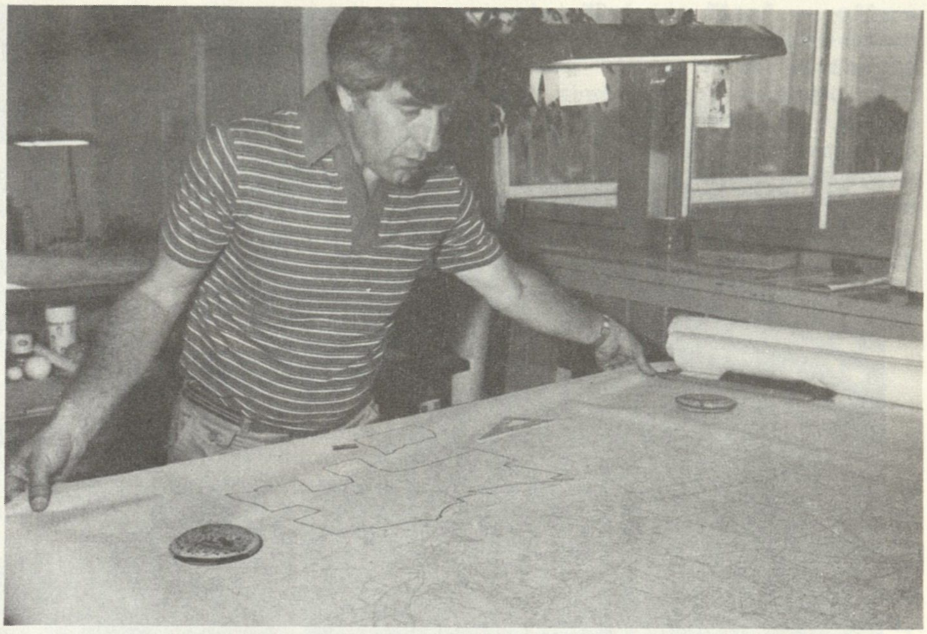
If you think of a map as something that just tells you how to get from here to there,

DOT'S communications office produces the information sections on the back of the State map, but according to Cora Mokritsky and John Stannard, this involves numerous other persons and departments as well. Design of the 1983-84 map was done by Leon Rzewnicki, recently retired from DOT. Photographs are the work of Dominick Ruggiero of the Department of Economic Development. Some 385,000 copies of the map have been printed for the state departments of Economic Development, Transportation, Environmental Protection, and Motor Vehicles. An additional 30-35,000 were purchased at the base price from the printer for free distribution by corporations, chambers of commerce, realtors' groups, and similar organizations.

you haven't seen this one. In addition to providing the same information as a gas station map, it is an encyclopedia of useful facts impossible to come by in any other single publication.

Special information

For example, on the highway map side of the 2' by 3' sheet, which folds to 4" by 9" to fit glove compartments, special symbols indicate the locations of State parks and forests, hiking trails, lakes and ponds, waters open to public fishing, State information centers, full-service areas along highways, regulated hunting areas, State Police barracks, fish hatcheries, heliports, major and minor airports, ferry ports, railroads, and town and county borders.



According to DOT cartographer Wayne DeCarli, the first State produced version of the copyrighted State map, which came out in 1963, took a year and a half in the making. For some years the map was updated annually, but now it comes out in a new edition only every second year. The 1983-84 map took about two months to update. Besides a new "look" it also includes some new information such as grid lines.

Town and city maps

The big map is bordered by small close-up maps showing major streets and roads in Greenwich; Stamford-Norwalk and vicinity; Danbury; Bridgeport and vicinity; New London-Groton; Norwich; Hartford and vicinity; Bristol-New Britain area; New Haven and vicinity; Wallingford; Willimantic; Meriden; Middletown-Portland; Ansonia-Derby-Shelton; Torrington; and Waterbury-Naugatuck.

Keyed list of places

Next to the big map is a table listing more than 500 cities, towns, and places, each keyed with a letter and number to steer you to where it is on the map. Because very small type has to be used to get so many names in limited space, the list is difficult to read at dusk or in the feeble glow of a car's dome light. If you are likely to be referring to it under such conditions, or if you have poor eyesight, we suggest you carry a flashlight and a small magnifying glass in your glove compartment.

Tolls and fares

The back of the opened map contains an astonishing amount of information. For example, it lists all toll stations on Connecticut highways and bridges, gives the amount of toll at each, and the prices of books of tickets and toll plates. It also lists the fares on the Chester-Hadlyme and Glastonbury-Rocky Hill ferries.

Rail lines

You'll be surprised by the amount of rail and bus information the map gives you. One list consists of the passenger stops on what used to be the Conrail line from New Haven to Grand Central Station in New York, now operated by the Metro North Commuter Railroad Company. It also gives the stops on the line's Waterbury, Danbury, and New Canaan branches and includes the information phone numbers in the Stamford, Bridgeport, and New Haven areas.

There is also a list of Connecticut stops on Amtrak's New York to Springfield line, its Washington to New York to Boston line, and its Washington/Montreal line, as well as its toll-free information number.

Bus lines

Another list gives the names and phone numbers of local bus companies in 19 Connecticut cities, with a simple map showing the region each company serves.

Airports

Still another tells which airlines serve each of the State's major airports; namely, Bradley International; Groton-New London; Hartford-Brainard; Sikorsky Memorial; Tweed-New Haven; Windham; Danielson; and Waterbury-Oxford.

Donald Aubrey of the State Department of Transportation's cartography section, which produces the official State map, demonstrates how roads and highways are scribed onto one of five negatives. To ensure absolute registration of colors of the delicate lines and tiny printing on the map, paper is aged for three weeks before printing and the entire five-color run of over 400,000 maps is printed in a single day.

Attractions, accommodations

You are told where to call, toll-free, for information on Connecticut tourist attractions, accommodations, and private campgrounds. The highway locations of the State's Travel Information Centers on I-91, I-84, I-86, I-95, Route 15, and Route 52 are given.

Along with the State parks and forests lists are rules and general information pertaining to their use, with a paragraph telling where to get information on hiking trails. A description of the rules and conditions that apply to camping in the parks and forests is included.

Hunting, fishing, skiing

There is also a short description of hunting and fishing in the State and a description of the licenses needed and the fees for residents and non-residents. There is a list of State trout hatcheries, with a letter-number key to the map. Five Connecticut ski areas are also listed, and there is a brief description of the State's three covered bridges, with letter-number keys to the map.

Boat launching sites

Ninety-eight public boat-launching sites are listed with letter-number keys to indicate their positions on the map, with asterisks indicating the ones with access to salt water.

A suggestion

Unfortunately, this year's map does not include a very useful feature of earlier editions: the section headed "Selected Connecticut Attractions," which listed hundreds of interesting things to see or explore in 89 towns and cities. So, if you have a 1981-82 map, we suggest you clip the list and staple it to the new map for reference when you are looking for nature centers, zoos, bird sanctuaries, marine life aquariums, rose gardens, or arboretums. It includes an odd assortment of museums, such as a nut museum, a whale museum, a clock and watch museum, a submarine library museum, children's museums, Indian museums, furniture museums, a doll museum, an aviation museum, craft museums, and art and scientific museums. It gives the locations of historic sites and historic houses open to the public, amusement parks, train rides, a carousel, and river boat, Mark Twain's house, a castle, a dinosaur park, an herb farm, an up-and-down sawmill, beaches, and craft center.

Mileage table

A distance table shows the mileage between 46 Connecticut towns and also the mileage from any one of them to Albany, Boston, New York, Providence, Springfield, Westerly, and Worchester.

Driving rules

The Department of Motor Vehicles -- in a short article headed "Driving Tips" -- offers out-of-staters and Connecticut drivers six bits of advice to keep them out of trouble. It covers such problems as license and registration requirements, reporting accidents, non-resident privileges, studded snow tires, child passenger restraints, and school buses. It also names the cities where it has offices and lists its office hours.

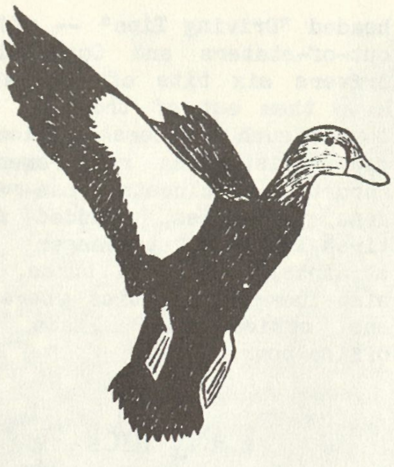
Lady luck

For lucky tourists who -- after paying for gas, tolls, admissions, meals, and motels -- still find a few dollars burning holes in their pockets, the Department of Special Revenue helpfully provides suggestions for getting rid of them. It describes its four kinds of lotteries; lists the New Haven address of Teletrack betting parlors; and gives the addresses of Hartford's, Bridgeport's, and Milford's jai-alai courts and the Plainfield address of Connecticut Yankee Greyhound Racing's Greyhound Park.

How to get map

The free map may be requested from, or picked up at: the Department of Economic Development's Tourism Office, 210 Washington Street, Hartford 06106 (1-800-842-7492); or the Department of Environmental Protection, Room 110, 165 Capitol Avenue, Hartford 06106 (1-800-842-2220). ■

DOT cartographers update State, town, and county road maps annually and do other special mapping projects. George Jafferis, here, is developing a map of bicycle trips in the State. Many of the maps produced are available to the public. One of the biggest, and a "best buy," is the 41" by 54" wall map, at a one inch equals two miles scale, which shows the State and rural road network. It sells for $4 a copy, plus sales tax for Connecticut residents (7.5 percent or .30 per map), plus handling (1-3 maps, $1; 4-7 maps, $2). Town and county maps are also available. For a complete list, prices, ordering instructions, write: DOT Bureau of Administration. PO Drawer A, Wethersfield, CT 06109; or call 566-5584 or 566-5585.



Black ducks

The black duck was once the number one bird in the Atlantic Flyway hunter's bag, and it has always been a prized bird of New England waterfowlers. Unfortunately, the black duck population has declined at an average rate of 1.5 percent per year over the last 20 years. Biologists are not yet sure of all the reasons for the long downward trend. However, winter habitat destruction, interbreeding with mallards, and high harvest levels are believed to be contributing factors. Recent evidence suggests that black ducks may be negatively affected by pesticides and acid rain.

As part of the effort to stabilize the black duck population, new hunting regulations, designed to reduce the take of the black ducks, will go into effect this year.

The restrictions in Connecticut, north and south zones, are: Early seasons (October 15 to 29): no black ducks shall be taken; late seasons (November 23 to December 27): one black duck in the daily bag.

Waterfowl hunters will need to be careful in identifying black ducks. Black ducks and mallards are often found together and look very much alike. But the careful hunter can tell the difference between the two species. The mallard hen has a lighter-colored breast and light tail feathers and distinct white borders on the upper and lower edges of the blue patch occurring on the wing.

The black duck of both sexes is uniformly dark except for the contrasting light underwings. Hunters are urged to be especially cautious under poor light conditions when distinguishing the two species is most difficult. ■

Fall dog trials

DEP's Wildlife Bureau has announced dates and locations of this fall's cooperative non-shooting field trials. These dog trials are held on State field trial areas around Connecticut. Pheasant and quail used for the trials are cooperatively supplied by the Department of Environmental Protection and individual field trial clubs. Additional information is available from the Wildlife Bureau, 566-4683.

October 10, 11, 12, 13*	Northeastern Championship	Glastonbury Meadows, Glastonbury
October 14, 15, 16*	48th New England Futurity	John Flaherty Field Trial Area, East Windsor
October 21, 22, 23	Tartan Gordon Setter Club, Inc.	John Flaherty Field Trial Area, East Windsor
October 30	Sett-Point-Britt-Club	Mansfield Hollow, Mansfield
November 6*	Branford Gun Club	Branford Permit-Required Area, North Branford
November 6*	Glastonbury Sportsmen's Association	Glastonbury Meadows, Glastonbury
November 11, 12, 13	Region #1 Amateur All-Age Championship	Glastonbury Meadows, Glastonbury
November 19, 20	Nutmeg German Shorthaired Pointer Club	John Flaherty Field Trial Area, East Windsor
November 21, 22, 23	Nutmeg German Shorthaired Pointer Club (Region #1 Championship)	John Flaherty Field Trial Area, East Windsor
November 25, 26, 27	Central Connecticut Bird Dog Club	John Flaherty Field Trial Area, East Windsor

*Trials using pheasants; all others use bobwhite quail.

By Leslie Bieber,
Citizens' Participation Coordinator

For Your Information

Waste management plan released

The revised Connecticut Solid Waste Management Plan has been released in draft form. The plan addresses the serious problem of the disposal of municipal solid waste as the State's landfill capacity becomes exhausted.

According to estimates from the Solid Waste Management Unit, the landfills currently in use in Connecticut will be filled by 1987, and the chances of establishing new land disposal areas are slim. The plan breaks the state down into nine regions, or wastesheds, details the existing solid waste disposal system and its probable life, and proposes short and long-term approaches to handling waste.

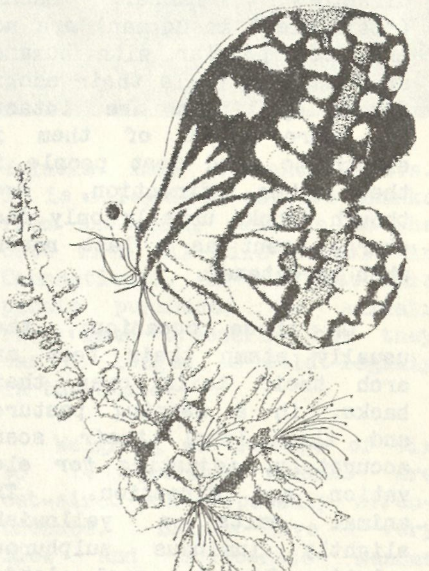
The ultimate solution to the waste disposal problem will be resource recovery. Several options for energy markets for the various wastesheds are discussed in the plan, without pinning municipalities down to a specific system. Landfills will continue to be needed as disposal sites for wastes that cannot be handled by resource recovery plants, for the ash residue left from the plants, and for those times when the recovery systems may be down.

Municipal officials, environmental groups, and private citizens are encouraged to review and comment on the plan. A series of public hearings will be held this month. For specific times and places or to obtain a copy of the draft, contact Tess Gutowski, Water Compliance Unit, State Office Building, Hartford, CT 06106; 566-2588. ■

Dinner and conservation

The Connecticut Association of Conservation and Inland Wetlands Commissions (CACIWC) will be holding its annual meeting on Thursday, October 27, at the Yankee Silversmith Inn in Wallingford. The theme of the meeting will be "Local Involvement in Hazardous Waste Management." Speakers will include Mark Bobrowski from Rural New England, Inc.; Kathleen Golas from the League of Women Voters of Connecticut; and Michael Deland, Regional Administrator of the U. S. Environmental Protection Agency.

The meeting is open to any interested citizens. Cost for the evening is $18 including dinner. For more information or for reservations, please contact Leslie Bieber, Information and Education Unit, Department of Environmental Protection, State Office Building, Hartford, CT 06106; 566-3489. ■



Popularity's not one of its problems!

"Stinktier"

By Susan Subak, Environmental Intern

Skunks are not very popular with other animals. Few predators will bother them save for the fox and the great horned owl which appear to have great olfactory tolerance. Skunks ("Stinktier" in German) are not any more popular with humans, at least not while their odoriferous qualities are intact. The mere sight of them is enough to send most people in the other direction, even though skunks usually only discharge scent as a last resort when threatened.

On these occasions, they usually stamp their feet and arch their tails over their backs, in a warning posture, and then level their scent accurately, adjusting for elevation and direction. The animal emits a yellowish, slightly luminous sulphurous solution from two anal glands, each containing about one tablespoon of scent. They can send the discharge as far as 12 feet. A skunk fighting for his life can release at least five good shots. The smell of skunk is persistent, but soaking people, pets, or clothing in dilute solutions of vinegar, tomato juice, household chlorine bleach, or ammonia may help (note well the warnings on the containers if using the latter two products).

DEP's Wildlife Bureau receives a number of complaints from persons pestered by skunks rooting in garbage cans, digging burrows beneath porches, or scratching around yards looking for insects. Skunks are on the lazy side and will avoid hunting for food or digging their own burrows, if possible. As it is with all nuisance animals, the solution is to make your home or property less attractive to the animal.

Skunks are not very energetic and will probably lose interest in your garbage if it is tightly covered. Skunks burrowing beneath porches and other structures generate the most complaints. To get rid of skunks ensconced beneath your building, seal all entrances save for the main opening. As skunks often doze in daytime and amble out of their burrows in late afternoon, spread a layer of flour around the entrance in the evening and look for tracks. To verify that the tracks do belong to the skunk, see if the hind and forefeet have five toes, although the fifth toe may not be obvious. The hind foot tracks are about two and one half inches long, and claw marks will be visible. If the den is empty, cover the remaining entrance, but between early May and mid-August check to see that young skunks are not trapped inside.

Unfortunately, skunks digging in the grass for grubs may tear up a whole yard. In these cases, it may be a good idea to set a live trap using a wooden box trap or a wire mesh trap. Covering the trap with burlap may prevent the skunk from becoming alarmed and prevent your being sprayed. Put peanut butter on bread, sardines, cat food, dog food, or chicken entrails inside as bait. After the skunk is trapped, release it in a mixed forest and field

Leonard Lee Rue III

habitat at least five miles from your home. The skunk can be released from afar by tying a length of rope to the cover. The Bureau of Wildlife at DEP keeps a list of volunteer trappers in case other measures fail. But be prepared to make a number of calls because most trappers have an aversion to skunk handling.

Skunks may be nuisances, but if they are merely around, they are not necessarily causing any harm. Skunks are helpful for they feed on a large number and variety of garden pests, such as field mice, rats, and moles and insects such as cutworms, potato beetle grubs, and other lawn and crop-damaging species.

Skunks mate during a three-day period during late February or early March. After two months, the female bears an average of six kits. By the time they are seven weeks old, they have the potential to be malodorous like their parents. Beginning in late fall, the groups of females and young den together in partial hibernation. Although the skunks tend to be very lethargic in winter, they may get up occasionally to gather food. During this time of year, they feed on small mammals, carrion, or molluscs. By spring, the young are ready to start families of their own.

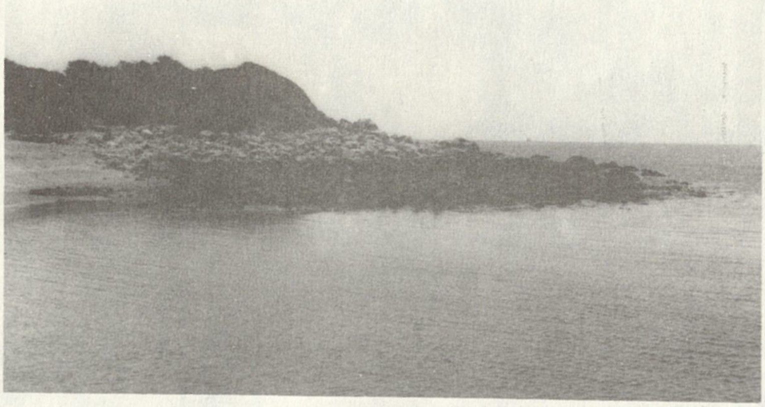
Unpopular though the skunk may be, some people make these animals into household pets. It is illegal to capture skunks from the wild, just as is the case with all wild animals in Connecticut. In the past some people purchased the animals from game breeders, but they can no longer be sold legally in the State.

Weighing an average of six to 14 pounds, skunks are cat-sized and reputedly affectionate. Skunks have a very slow and deliberate manner which some say reflects low intelligence but which others attribute to a high level of confidence. Perhaps the skunk's stolid manner is only to be expected of an animal accustomed to others' getting out of its way. ■

Bluff Point reflects diversity of coastline

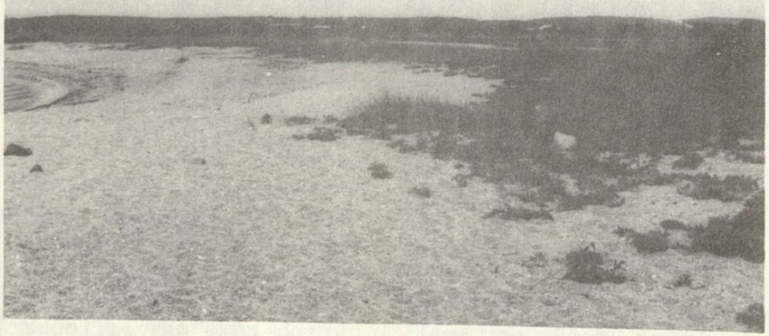
By Diane Giampa, Public Participation Coordinator

Bluff Point in Groton is an undeveloped coastal peninsula that has been protected since 1975 by a Special Act of the Connecticut General Assembly. The Act established a coastal reserve, recognizing the value of the natural and scenic characteristics of the bluff, beach, wetlands, and dunes. In a small area, Bluff Point reminds us of the diversity of the Connecticut shoreline.



The focal point of the area is the coastal bluff. Also called a seacliff, it is made of glacial till, a mixture of rock and stone, resting on a foundation of bedrock. Over time, the finer, sandier materials surrounding it erode more rapidly than the glacial till, leaving the bluff standing alone. At one time this cliff probably extended to the end of the rocky area.

The salt spray rose has its origins in Asia. It thrives on the dunes at Bluff Point since it does best in open areas with little competition from other vegetation. Its white or red flowers are tolerant of salt spray, so it's often used for landscaping coastal properties.



Ron Rozsa photos

The farther west you walk on the beach, the softer and finer the sand. But here, closest to the bluff, the beach is coarse and gravelly. Protective dunes are not likely to form near the bluff, since the heavier sediments cannot be readily transported by the wind. This means that these low-lying sections are particularly susceptible to damage from coastal storms.

coastal
area
management
71 capitol avenue hartford conn. 06106

Shang Wheeler's art

In an era when American folk art is being avidly examined and collected, there is no folk art form more American than decoy making. To examine this practical American art form and to celebrate a regional carving school and its greatest maker, the Old State House has organized an exhibition entitled "Shang Wheeler and the Housatonic Decoy Tradition". The exhibition opened at the Old State House in Hartford September 23rd and continues until October 30th. The show will also be at the Bridgeport Museum of Art, Science and Industry from mid-November until January 15, 1984.

Charles E. "Shang" Wheeler was an extraordinary man -- a state senator, a Long Island Sound oysterman, an early environmentalist, a congenial sportsman, and a self-taught decoy carver of the first order. As a businessman and politician first, then a carver, his output was small. Today his works are largely in private collections and, when available, fetch astronomical prices at auction.

The exhibition will include decoys by Wheeler's predecessors, contemporaries and successors, along with more than 50 Wheeler decoys and an array of his drawings, paintings, and meticulously formed fish models. Dixon Merkt, of Guilford, is the exhibition's curator.

The Old State House, at 800 Main Street in Hartford, is open from 10 a.m. to 5 p.m. Monday through Saturday, from noon to 5 p.m. on Sunday. ■

Wood duck by Shang Wheeler: Richard Grave

Sunday bikers

Two events for bicyclists will be held on Sunday, October 16.

On that date the March of Dimes of Fairfield County is sponsoring "Super-Ride," a bike-a-thon of 75 kilometers beginning in Greenwich Point Park, Greenwich. Prizes, entertainment and refreshments will be available. There is no entrant's fee; and all monies raised will go to the March of Dimes. Registration begins at 8 a.m. The rain date for "SuperRide" is Sunday, October 23. More information may be obtained at: March of Dimes Birth Defects Foundation, Fairfield County Chapter, Coach Run, Suites 1 & 2, 312 Main Avenue, Norwalk, CT 06897 (phone: 847-4515). Ask for Della Spencer.

Also on October 16, the Deep River Rotary Club is sponsoring its second annual fall foliage ride through the historic towns of Deep River, Essex, and Old Saybrook. A well-patrolled half metric century (32 miles) will be offered with marshalls, sag wagons, detailed route map, refreshments and hosted rest stops. The $5 registration fee will be used to benefit the Deep River Rotary Club Scholarship Fund. The tour begins between 10 and 11 a.m. at the Deep River elementary school. The rain date is October 23. For more information, write or call: Deep River Rotary Club, Box 66, Deep River, CT 06417 (phone: 526-2802). ■

Attention, educators!

Need more energy in your classroom? Attend CONNECT DAY, Wednesday, November 2, 1983 at the East Hartford, Connecticut Holiday Inn!

"Energizing Education" is the theme for this conference which provides information about energy options. Demonstrations of innovative energy education programs and teaching strategies adaptable for all grade levels will be featured. Participants may select from sixteen outstanding workshops.

Displays of energy films, textbooks, computer programs and other teaching resources will be available. Free materials, wine and cheese, lunch, and exhibits by a variety of energy companies are included in the registration fee. CONNECT DAY is open to educators, administrators and all interested parties. For further information and brochure, contact:

CONNECT
1280 Asylum Avenue
Carriage House
Hartford, CT 06105
241-4968 ■

Variety at Holland Brook

The autumn events at Holland Brook Connecticut Audubon Center in Glastonbury are many and diverse. The October schedule includes a "Selden Island Canoe Trip" (fall foliage viewed from the Connecticut River, October 12); a "Bird Seed Pre-Order Sale" (quality seed products and feeders, October 15); a "Wildflowers of Meadow and Forest Slide Show" (featuring the photography of Paul Frese, October 19); and a "Things That Go Bump in the Night" hike (Halloween fun, including a carved pumpkin contest, October 22). Information on fees and registration can be obtained by calling the Center at 633-8402.

Holland Brook is also offering "Music in the Meadows," a coffeehouse-style series of musical events. Held in the informal atmosphere of the nature center, the series features primarily folk and acoustic performers. The fall calendar includes Lorre Wyatt (variety and sing-alongs, October 21), Debbie Fish and Diane Sinabria (traditional and contemporary folk styles, November 4), the Barrel House Jug Band (funny and educational family entertainment, November 13), and Tapestry (European and American minstrel music, November 18). For information regarding admission, showtimes and reservations call the Center (633-8402). ■

Earth Day

The Naugatuck Junior Woman's Club will be sponsoring its First Annual Earth Day on Saturday, October 22, from noon to 4 p.m. Various conservation and environmental groups will be represented at booths on the Green in Naugatuck. In case of rain, activities will be held in St. Michael's Hall on the Green. For more information call Pat Plasky, Chairperson, Earthday, at 729-9227. ■

Festival at Roseland

One of New England's largest gatherings of Colonial and Victorian craftsmen, artists and antique collectors will exhibit and sell their wares at the Festival at Roseland Cottage located on Route 169 in the rural northeastern Connecticut town of Woodstock, on Saturday, October 15 from 10 a.m.to 5 p.m. and on Sunday, October 16 from noon to 5 p.m. Roseland Cottage, a unique gothic revival historic house museum, is less than an hour-and-a-half from Hartford, Springfield, Worcester, Boston and Providence, and two-and-a-half hours from New York. Admission is $2. Traditional musicians, puppeteers, and other entertainment will be provided. Refreshments will also be available. ■

Courses announced

This fall a variety of interesting courses, including ones in woodlot management, geology and backyard astronomy, will be offered at the Thames Science Center, New London.

In association with the Connecticut Arboretum and the Connecticut Forest and Park Association, the Center will present an all-day workshop, "Woodlot Management," from 10 a.m. to 3 p.m. on Saturday, October 15. The morning session will offer talks on laws governing woodlots, state services to landowners, specific techniques to improve timber and firewood harvest, and practices which preserve ecological diversity. The afternoon session will involve a field trip to a demonstration woodlot in the Connecticut Arboretum. Fees are $25 for members of the Science Center, Arboretum or the Forest and Park Association; $30 for non-members.

A five-session course, "Conversations with the Earth," will explore the forces that created the geology of southeastern New England. It will meet from 7:30 to 9 p.m., Wednesdays, November 9-30. A field trip to the Briggs Street cut on Saturday, December 3, will provide participants with examples of folding, faulting, glaciation, as well as examples of metamorphic and igneous rock types. Fees are $30 for members of the Center; $35 for non-members.

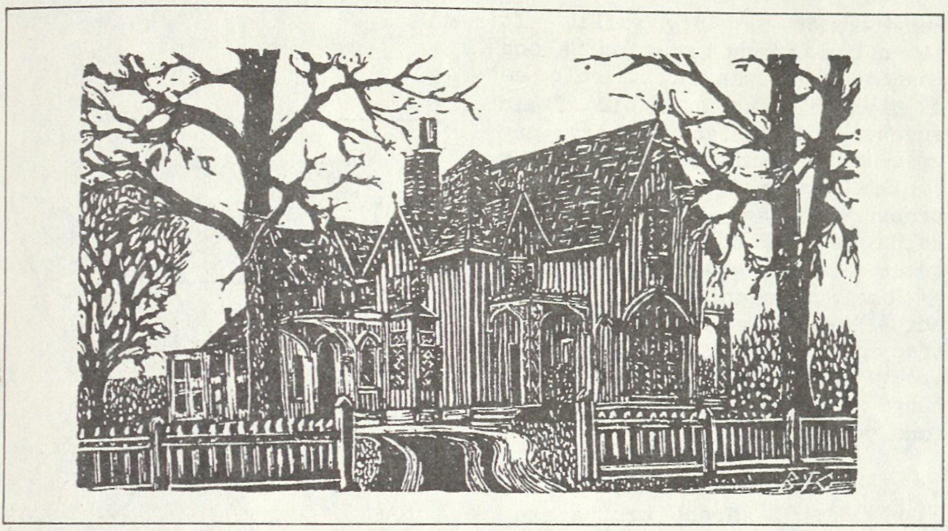
"Backyard Astronomy," a four-week course, will meet 7:30 to 9:30 p.m., Mondays, November 21 through December 12. The course will introduce and illustrate methods for locating and identifying constellations and bright stars. Participants will observe the moon, planets, the Andromeda Galaxy, Pleiades and Hercules clusters and meteors. Fees are $25 for members; $30 for non-members.

For more information about these and other courses, or to register, call the Thames Science Center at 442-0391. ■

Views of the past in Washington

The American Indian Archaeological Institute, Route 199, Washington, is boasting two new exhibitions which opened on September 24.

"Southern New England -- The First One Hundred Years of Contact" presents artifacts of



Roseland: bloc[illegible]y Bailey J. Cornell

the Contact period which illustrate: 1) typical native objects of the 17th and early 18th centuries; 2) trade items; 3) how some trade items were added to the native tool kit and others were refashioned; and 4) the lack of significant cultural change during the first century of Contact. The artifacts are from the Institute's Edward H. Rogers Collection and on loan from the William Penn Museum, the Milford Historical Society, Old Sturbridge Village, Yale University's Peabody Museum of Natural History, Mark Shepard, and Truman Richmond. The exhibition will remain at AIAI until September 1985.

"Plants and Paints -- Pigments Used to Decorate Woodsplint Baskets of the 19th Century," a new basket exhibition, focuses on the pigments used by the Eastern Algonkian to decorate woodsplint baskets in the nineteenth century. This exhibition will feature fine baskets donated to AIAI by local collectors and lent to AIAI by Charter member Lyent Russel, the New Milford Historical Society, and Old Sturbridge Village. "Plants and Paints" will remain on exhibit until September 1984.

Also at AIAI, the Small World Film Festival, presented by the United Technologies Corporation, will continue through the month of October according to the following schedule:

October 8,9, 10: "Age of Discovery" (historical events in Europe from the Crusades to Magellan) and "European Expansion: Its Influence on Man" (15th century voyages and discoveries)

October 15, 16: "The Rescue of Mr. Richardson's Last Station" (preservation of the historic Union Railroad Station in New London) and "Return to the River" (uses of the Connecticut River today)

October 22, 23: "The Shakers in America" (over 200 years of contributions the Shakers have made to American life)

October 29, 30: "Meadowcroft Rock Shelter" (the story of the oldest excavated archaeological site east of the Mississippi)

All showings are at 2:30 p.m. Admission is by membership or donation of $2/adults and $1/children ages 6 to 18. Senior Citizens are invited free each Monday at 1:30 p.m. For more information contact the American Indian Archaeological Institute, Route 199, PO Box 260, Washington, CT 06793 (phone: 868-0518). ■

Pamphlets available

Three information pamphlets are currently available to aid local wetlands and conservation commissions.

The popular pamphlet, "Wetlands Protection in Connecticut," produced by the DEP Inland Wetland Program, has received nationwide distribution as a result of being cited in the National Wetlands Newsletter of the Environmental Law Institute of Washington, D.C. Copies are available by writing to the DEP Inland Wetlands Program, Room 201, State Office Building, 165 Capitol Avenue, Hartford, CT 06106.

"Logging and Water Quality in Connecticut," a practical guide for protecting water quality while harvesting forest products, has been developed by the Connecticut 208 Forestry Advisory Committee. This pamphlet is available through the DEP Forestry Unit, Room 262, State Office Building, Hartford, CT 06106; (203) 566-5348.

"The Land, the Water, and Your Horse" has been produced by the Fairfield County Soil and Water Conservation District. This informative pamphlet deals with the environmental aspects and regulations dealing with horse ownership and is available from the District Office, Route 6, Bethel, CT 06801 or by calling (203) 743-5453. ■

Subscribe

The bi-monthly newsletter, "Hazardous Waste Management: A Connecticut Perspective," provides timely and concise information on this increasingly complex issue; keeps you up with legislation and regulatory activities; identifies resources and helps you participate in the development of State and federal programs. Subscribe now. Individuals, $5; nonprofit or educational groups, $10; businesses, $15. Make checks payable to "LWV Hazardous Waste Newsletter." Mail to LWV Hazardous Waste Newsletter, 145 Ballard Drive, West Hartford, CT 06119. ■

Trailside Botanizing

By G. Winston Carter

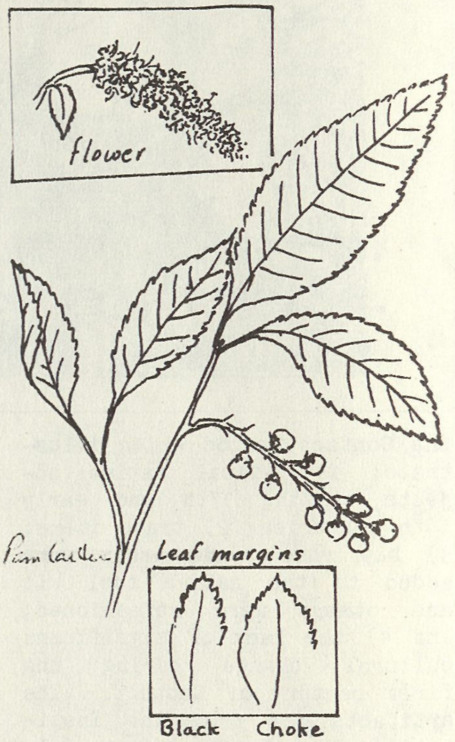
Black cherry
(Prunus serotina)

When the flowers and berries of the black cherry have disappeared, the yellow leaves found on either the plant or the ground may still reveal its identity. Many of these leaves still retain a brownish fuzz along the mid-rib of the lower part of the leaf. This and the white raised, horizontal lenticels on the larger branches are two of the ways of differentiating black cherry and choke cherry. Other distinctions between these two species of cherry are the presence of brown pith and the incurved teeth of the leaves of the black cherry.

Prunus serotina grows on many sites except those with very wet or very dry soils. It is often found growing along roadsides or playing a role as a pioneer plant in old field succession. Black cherry may grow to a considerable height in the forest if it can find a proper opening in the canopy, which is not too common. Old trees can be easily recognized by their characteristic potato chip-like, black bark. The tree grows rapidly, is moderately long-lived, and bears a large fruit crop every three or four years.

The flower of the black cherry is a drooping raceme, and blossoms appear after the leaves in late May. The fruit is a black berry when it ripens in September. It provides food for a large number of game animals and for over 70 types of birds.

The wood takes a fine polish and has been used for furniture and interior finish of houses. With the scarcity of big trees, cherry wood is now used more for smaller articles which require perfection of wood and no warping.



DEP Citizens' Bulletin
State of Connecticut
Department of Environmental Protection
State Office Building
Hartford, Connecticut 06106

SECOND CLASS POSTAGE PAID
AT HARTFORD, CONNECTICUT